Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A distributed pipeline scheduling method for a system which includes a plurality of input ports for inputting data, a plurality of output ports for outputting data, a data switch element for switching the data input from the input ports and transferring the data to the output ports, and a scheduler having a distributed scheduling architecture for controlling the data switch element, and determines connection reservations between the input ports and the output ports, comprising the steps of:

causing the scheduler to independently assign time slots of the same size to information transfer processing and reservation processing, respectively; and

processing information transfer processing and reservation processing in the assigned time slots in a pipeline fashion.

2.   (Original) A method according to claim 1, wherein

the scheduler includes N (N is a natural number) distributed scheduling modules for performing information transfer processing and reservation processing in units of time slots, and

the step of processing comprises the step of determining a connection reservation, by using the distributed scheduling module, for a predetermined time slot at a time point after a lapse of a time corresponding to 2N-1 time slots from a time slot from which the reservation processing is started.

3.   (Currently Amended) A distributed pipeline scheduling system comprising a plurality of input ports for inputting data, a plurality of output ports for outputting data, a data switch element for switching the data input from the input ports and transferring the data to the output ports, and a scheduler having a distributed scheduling architecture for controlling the data switch element,

wherein said scheduler comprises a plurality of input modules for performing reservation processing for different time slots at the same time in a pipeline fashion, and

said input modules respectively comprise information transfer processing means and reservation processing means for performing information transfer and reservation processing for different time slots at the same time in a pipeline fashion, wherein the different time slots are of the same size and wherein information transfer processing and reservation processing are respectively performed in the different time slots of the same size.

4.   (Currently Amended) A distributed scheduler for distributed pipeline scheduling which is used by a packet switch in a packet switching system, comprising

a plurality of input modules respectively having output port reservation information receiving sections, allocators, and output port reservation information transmitting sections and serving to perform distributed scheduling,

wherein said output port reservation information receiving sections, allocators, and output port reservation information transmitting sections within each input module simultaneously execute processing for different reservation time slots,

wherein the processing comprises information transfer processing and reservation transfer processing performed, respectively, in time slots of the same size.

5.   (New) The pipeline scheduling method according to claim 1, wherein the time slots of the same size are determined as being the largest among (a) time for information transfer reception and information expansion, (b) time for reservation processing, and (c) time for format conversion and information transfer transmission.

6.   (New) The pipeline scheduling system according to claim 3, wherein the time slots of the same size are determined as being the largest among (a) time for information transfer reception and information expansion, (b) time for reservation processing, and (c) time for format conversion and information transfer transmission.

-4-

7.   (New) The pipeline scheduler according to claim 4, wherein the time slots of the same size are determined as being the largest among (a) time for information transfer reception and information expansion, (b) time for reservation processing, and (c) time for format conversion and information transfer transmission.

002.1417256.1